

# PATENT ABSTRACTS OF JAPAN

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(21)Application number : 10-258250 (71)Applicant : MATSUSHITA ELECTRIC IND CO LTD

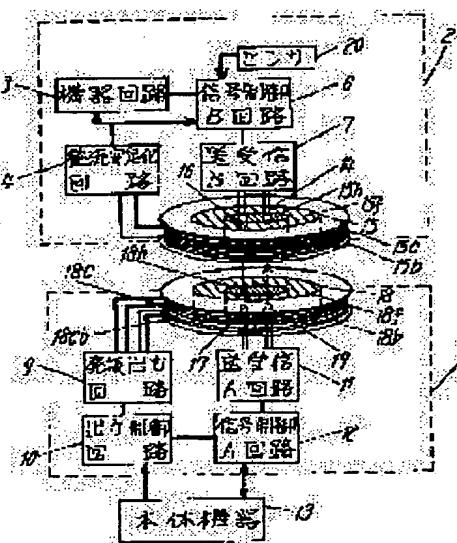
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## (54) NON-CONTACT POWER SUPPLY UNIT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To precisely position coils to each other and highly efficiently transmit power by forming a hole or a recessed part for disposing a signal transmitting element in the center of the coil, incorporating a signal sending and receiving element, a signal sending and receiving circuit, and a signal control circuit therein, and mounting a rotating apparatus and sensors.

**SOLUTION:** The first coil 18 has such a flat coil structure that a bobbin 18b is inserted in the outer-periphery of a ferrite core 18f having an opening 18h in the center thereof, and a winding 18c and an auxiliary winding 18cb are wound around the bobbin 18b. The second coil 15 has also such a structure that a bobbin 15b is inserted in the outer periphery of a ferrite core 15f having an opening 15h in the center thereof, and a winding 15c is wound around the bobbin 15b. This power supply unit has such a structure that runs switching current through the first coil 18 to supply electric power, and outputs the electric power generated at the second coil 15 to an apparatus. It is thus possible to conduct positioning easily and precisely and rotation, and combine coils with each other satisfactorily using the flat coil.



### LEGAL STATUS

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